



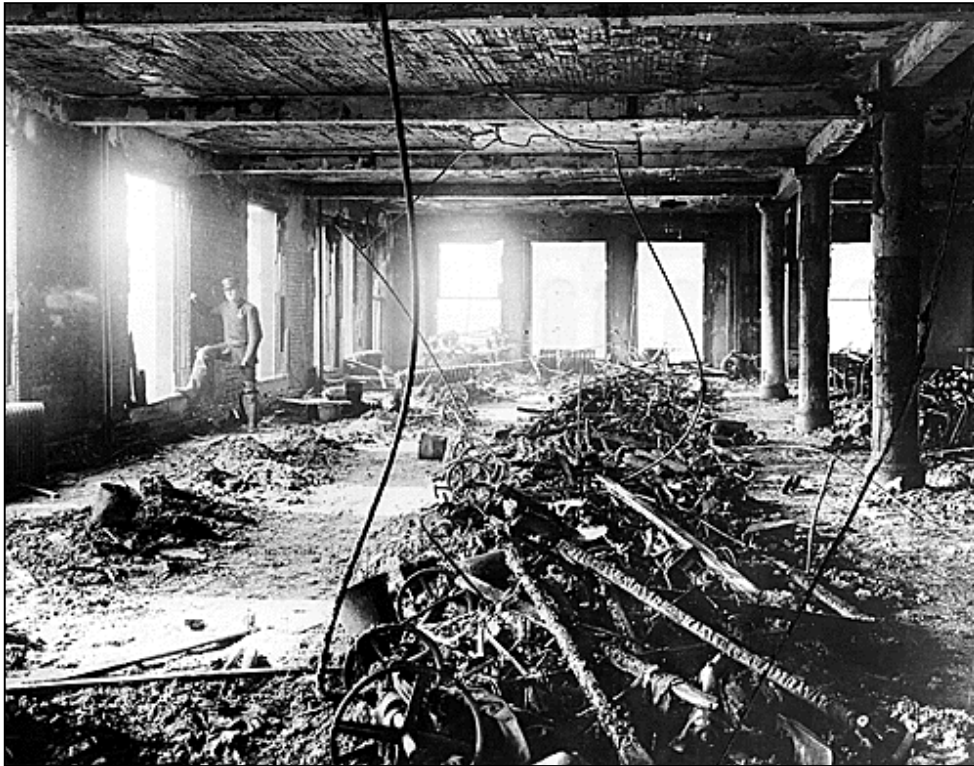
Standards Coordination Office



# Standards 101: International Standards

23 June 2016

# Early Drivers for Standards



New York City  
Triangle Shirtwaist  
Fire of 1911

# Standards do Matter

Type	Outlet	Plug	Type	Outlet	Plug	Type	Outlet	Plug	Type	Outlet	Plug
A			G			M			S		
B			H			N			T		
C			I			O			U		
D			J			P			V		
E			K			Q					
F			L			R					



# Today's Discussion of International Standards

- How is the **landscape** structured?



- What roles are available to **participants**?



- How does your international standards “approach” translate into tangible **results**?





- WTO TBT Agreement
- Key Organizations
- Code of Conduct



# The WTO TBT\* Agreement



2.4 Where technical regulations are required and **relevant international standards** exist or their completion is imminent, **Members shall use them**, or the relevant parts of them, as a basis for their technical regulations **except** ... for instance because of fundamental climatic or geographical factors or fundamental technological problems.

Technical regulations,  
standards &  
conformity  
assessment  
procedures

Legitimate policy  
objectives

no more trade-  
restrictive than  
necessary

Protect  
environment

non-discriminatory:  
global products  
treated no less  
favorably

Protect human  
health & safety



\*World Trade Organization Technical Barriers to Trade

# How are International Standards Managed?

- Key players include:
  - International Organization for Standardization (ISO)
  - International Electrotechnical Commission (IEC)
  - International Telecommunication Union (ITU-T)





# International Telecommunication Union (ITU)



- UN specialized agency for standardization and development of information and communication technologies (ICTs)
- Treaty-based organization
- Allocate radio spectrum and satellite orbits
- Develop standards to seamlessly interconnect networks and technologies
- 193 voting member states / 700+ non-voting private sector entities, academic institutions
- U.S. has single voice & participates through State Department





# International Organization for Standardization (ISO)



ISO: Reps from National Standards Institutes in 164 countries  
(one vote per country)  
Central Secretariat in Geneva  
Technical Management Board

~ 224 Technical Committees  
~19,000 published Standards  
(e.g. ISO/TC276  
Biotechnology)

US Experts on International  
TCs, WGs

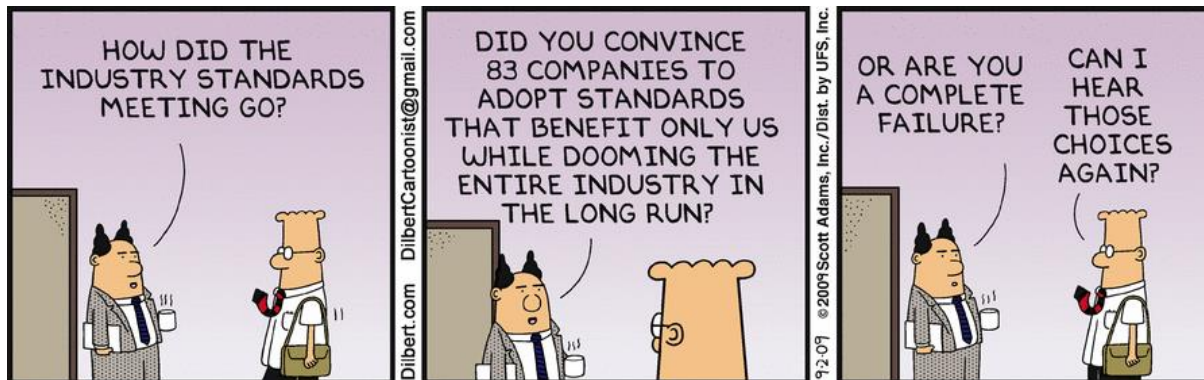
US Representative: ANSI

Activities of US Technical  
Advisory Group (TAG)



# ISO Code of Conduct

- Work for net benefit of international community
- Uphold consensus and governance
- Agree to clear purpose & scope
- Participate actively & manage effective representation
- Escalate & resolve disputes
- Behave ethically
- Respect others in meetings



<http://dilbert.com/stip/2009-09-02>



# US Roles

## International

### Technical Committee (TC)

Players: Countries

US Role: Represent US Position

Voting  
Policy setting  
Strategic Directioning

## Domestic

[Mirror Committee]

### US Technical Advisory Group (TAG)

Players: Organizations

Role: Represent Organization & US Interest

### Working Groups (WG)

Players: Experts

US Role: Represent Expertise in context of US Position

### Mirror Working Groups (WG)

Players: Experts

Role: Represent Expertise

Technical Work  
Reviewing  
Standards Dev.



# U.S. Engagement in ISO Work

- New technical areas may be proposed by any country
- New US TAGs identify management structure, apply for ANSI-accreditation
- TAG procedures published by ANSI, but there is some flexibility in TAG administration
- In TAGs, USG agencies may have different positions



# ISO/TC 276 *Biotechnology*

Secretariat: DIN

WG1 Terminology

Germany/  
Germany

WG2 Biobanking and  
Bioresources

France/  
Germany

**WG3 Analytical  
Methods**

USA/USA

WG4 Bioprocessing

Japan/  
Japan

WG5 Data Processing  
and Integration

Germany/  
Germany



# US TAG to ISO/TC 276 *Biotechnology*

*US TAG Administrator: US*

WG1 Terminology

C. Allocca /NIST

WG2 Biobanking and  
Bioresources

N. Ramirez/CAP

WG3 Analytical Methods

S. Lin-  
Gibson/NIST

WG4 Bioprocessing

J. Zhang/ GE  
Healthcare

WG5 Data Processing  
and Integration

M. Sussman  
/USDA

# ISO Deliverables

Publicly Available Specification (PAS)	Technical Specification (TS)	Technical Report (TR)	International Standard (IS)
Normative	Normative	Informative No requirements	Normative
Consensus in a WG	Technical Consensus in an ISO committee	Consensus in a committee	Consensus in a committee
Simple majority of P-members	2/3 of P-members approval	Simple majority of P-members	ISO Member Bodies + 2/3 of TC P-members approval (<1/4 votes disapprove)
Good when you can't get to an IS	Good when you can't get to an IS	Good when TC has collected relevant information e.g. test results	Approved DIS/FDIS published by Central Secretariat as IS
Review after 3 years Maximum life = 6 years (convert or withdraw)	Review after 3 years Recommended maximum life = 6 years	No life limit	No life limit (systematic reviews every 5 years or less)



Normative: necessary for application of standard  
Informative: assist in particular subject area

# Strengths of an Olympic-level Standards “Athlete”



- Industry engagement
- Interagency Partnering
- Workshop Organization
- Liaison
- New Member Recruitment
- US Interest Representation

- Innovative measurement sciences
- Enabling tools, methods, reference materials, and data
- Industry collaborations

- TAG/TC/WG Leadership
- Convening of national and international meetings
- Program Management
- Strategic Direction Setting
- Policy
- Standards Writing
- Research programs that underpin standards development



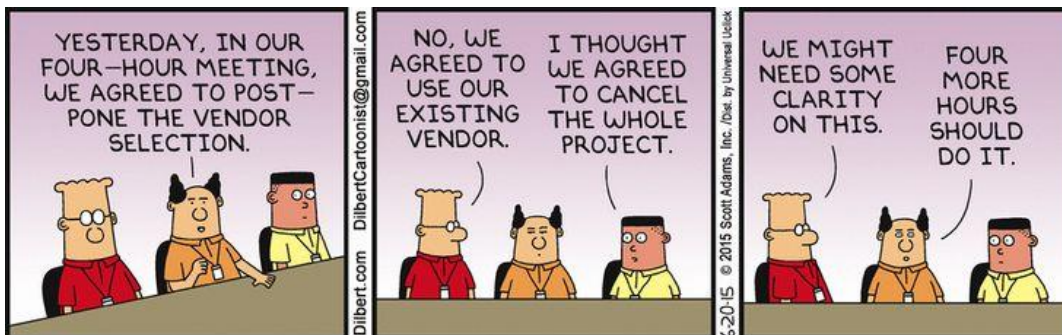


# Challenges

Language  
Communication  
Culture  
Ignorance

Laws  
Technology  
Regulations  
Agendas

Economics  
Policy  
Geography



<http://dilbert.com/stip/2015-06-20>

# Resources to support your participation

- [ANSI Guide for U.S. Delegations to Meetings of the IEC and ISO](#)
- [www.StandardsLearn.org](http://www.StandardsLearn.org) – ANSI web resource of educational tools for standards activities
- [ISO Resources for standards development](#) – including Code of Conduct, Directives, Standards development templates and procedures...
  - [How to Write Standards](#)
  - [My ISO Job](#)
- [USTR Information on the WTO TBT Agreement](#)



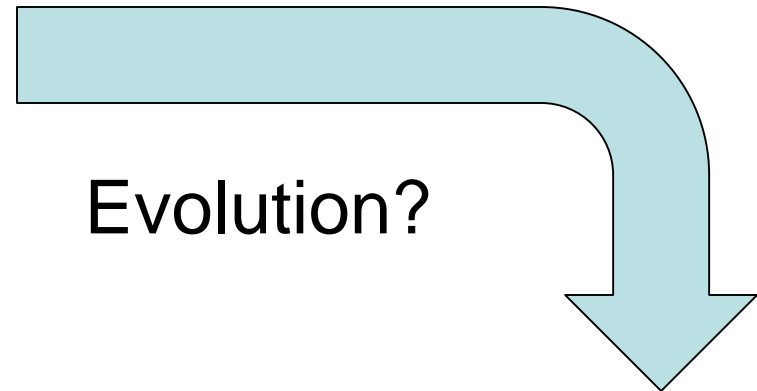
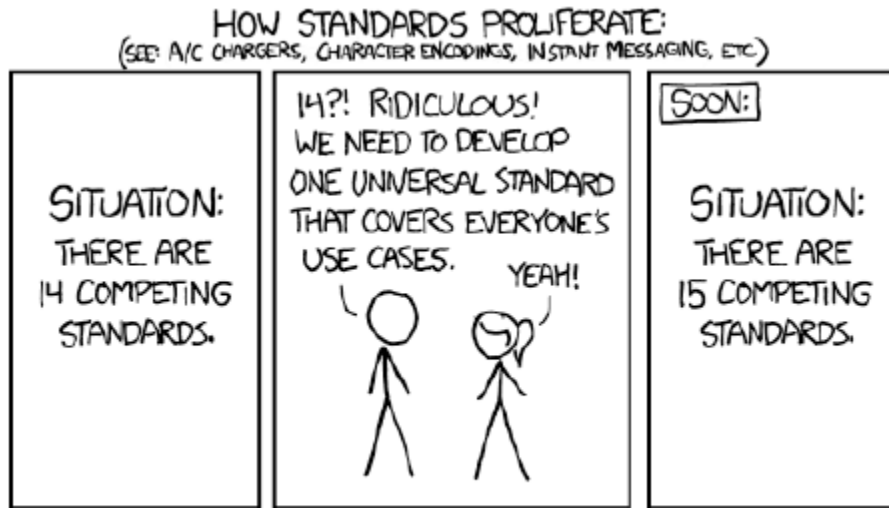
# Thank you. Any Questions?



**Credit:** Scott Adams, <http://dilbert.com/strips/comic/2009-08-31>

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Courtesy: [HTTP://XKCD.COM/027/](http://xkcd.com/027/)



Courtesy: [http://nighthacks.com/roller/jag/entry/xkcd\\_on\\_standards](http://nighthacks.com/roller/jag/entry/xkcd_on_standards)

